

Work Order ID 85619-2

\*85619\*

Page 1

June-12-12 8:51:03 AM

Item ID: D3910-1

Revision ID:

Item Name: Crosstube Lug

Start Date: 12/06/2012 Start Qty: 30.00

Required Date: 26/06/2012 Req'd Qty: 30.00

Reference:

Accept

\*N900040100\*

Setup Start \*NS1\*

Stop \*NS2\*

Cust Item ID:

Customer:

Approvals:

Process Plan: MLJ

Date: 12/06/12 Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start \*NR1\*

Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D3910

B

100

0.00

\*100\*

Bandsaw

Jeaspa Bandsaw

Memo

CUT BLANK 1.450" LONG

0.00

cut @ meter

110

0.00

\*110\*

HAAS I

HAAS CNC vertical machine #1

Memo

MACHINE AS PER FOLIO FA865 AND DWG

FOLIO REV:

DWG REV:

0.00

DEBURR

P/O: 17214

CL 12/06/13

CL 12/06/13 (80)

issue P/O: to meter  
machine as per dwg D 3910 REV. B

12/17/13 (38)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 85619

\*85619\*

Page 2

June-12-12 8:51:04 AM

Item ID: D3910-1

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Item Name: Crosstube Lug

Stop \*NS2\*

Start Date: 12/06/2012 Start Qty: 30.00

\*30\*

Cust Item ID:

Required Date: 26/06/2012 Req'd Qty: 30.00

\*30\*

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start \*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop \*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

120  
\*120\*

QC2 - inspect parts off machine FAI/FAIB

0.00

QC  
Quality Control

Memo

0.00

rec'd + inspect for transit damage  
attached c/c to w/o

130  
\*130\*

QC8 - inspect parts - second check

0.00

QC  
Quality Control

Memo

0.00

DAS  
16  
12/07/12

outs

(+38)

140  
\*140\*

Chemical Conversion Coat per QS1005 4.1

0.00

HandFinish  
Hand Finishing

Memo

0.00

38 76 12-7-19

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries

# Work Order ID 85619

**\*85619\***

Page 3

June-12-12 8:51:04 AM

Item ID: D3910-1

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Crosstube Lug

Start Date: 12/06/2012 Start Qty: 30.00

**\*30\***

Cust Item ID:

Required Date: 26/06/2012 Req'd Qty: 30.00

**\*30\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\***

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

150

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

Start Time: 8:15

38 X ✓

M-L

**\*150\***

Powdercoat

Memo

0.00

Temp: 320 °F

Finish Time: 8:45

Powder Coating

ml 21841

160

QC3- Inspect Part Finish

0.00

**\*160\***

QC

Memo

0.00

38 ✓

BR12-7-19

Quality Control

170

Identify as per dwg & Stock Location: St 464

0.00

**\*170\***

Packaging

Memo

0.00

38

12/07/20 JB

Packaging

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries

Work Order ID 85619

\*85619\*

Page 4

June-12-12 8:51:04 AM

Item ID: D3910-1

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Item Name: Crosstube Lug

Stop \*NS2\*

Start Date: 12/06/2012 Start Qty: 30.00

\*30\*

Cust Item ID:

Required Date: 26/06/2012 Req'd Qty: 30.00

\*30\*

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start \*NR1\*

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180	QC21- Final Inspection - Work Order Release	0.00							
*180*									
QC	Memo	0.00							
Quality Control									

12/17/23  
MF  
12-07-20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries



# Picklist Print

June-12-12 8:51:07 AM

Page 1

Work Order ID: 85619

\*85619\*

Parent Item: D3910-1

\*D3910-1\*

Parent Item Name: Crosstube Lug

Start Date: 12/06/2012

Required Date: 26/06/2012

Start Qty: 30.00

Required Qty: 30.00

Comments: IPP REV:A NEW ISSUE 09-11-25 JLM VERIFIED BY:DD  
REV:B AS PER REV B 10-03-23 JLM VERIFIED BY:DD IPP

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2423		Manufactured	No			100	f	476.3950	0.13	4.105263			
*D2423*									**				
Lug Extrusion													

CD 12/06/13

## Location

## Loc Qty

## Loc Code

MAT006

476.395

43722

161.5

68331

43.8506

81557

271.0444

4.11

D3910-1P

X30

12/7/13 (38)

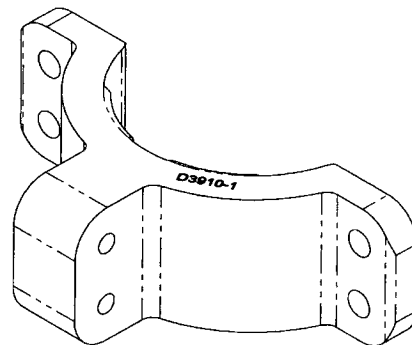
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

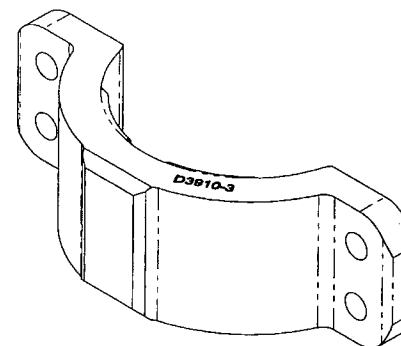
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**NOTE:** Date & initial all entries



**D3910-1 X-TUBE LUG**



**D3910-3 X-TUBE LUG**

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 85619 MJS

12/06/12

**RELEASED**  
2010-03-22  
WP

**NOTES:**

- 1) MATERIAL: MAKE FROM D2423 EXTRUSION
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: ENGRAVE PART NUMBER TO A DEPTH OF 0.010  $\pm$  0.005 IN THIS LOCATION WITH A TOOL TIP RADIUS OF 0.015  $\pm$  0.005
- 7) WEIGHT -1: 0.32 lbs  
-3: 0.25 lbs

B	Ø0.257 HOLES: 4 PL WAS 2 PL (A3-2) & (A3-3); R0.34 FILLET WAS R0.50 (A3-2) & (A3-3). REASON: SEE TR-D350-607-2		JPH	10.03.16
A	NEW ISSUE		JPH	10.03.04
REV.	DESCRIPTION		BY	DATE
DESIGN	AJS	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA		
DRAWN	JPH			
CHECKED		DRAWING NO.	REV. B	
MFG. APPR.		D3910	SHEET 1 OF 3	
APPROVED		TITLE	SCALE	
DE APPR.		X-TUBE LUG (350)	NTS	
DATE	10.03.16	COPYRIGHT © 2010 BY DART AEROSPACE LTD <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>		

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

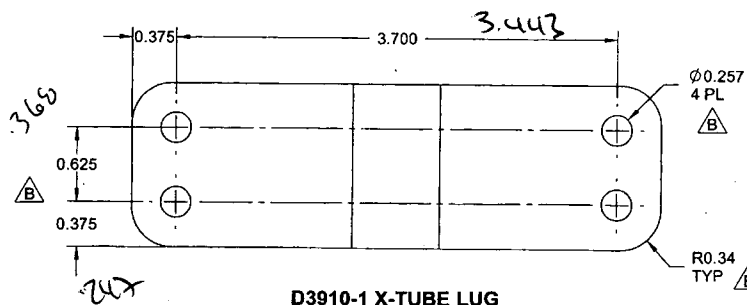
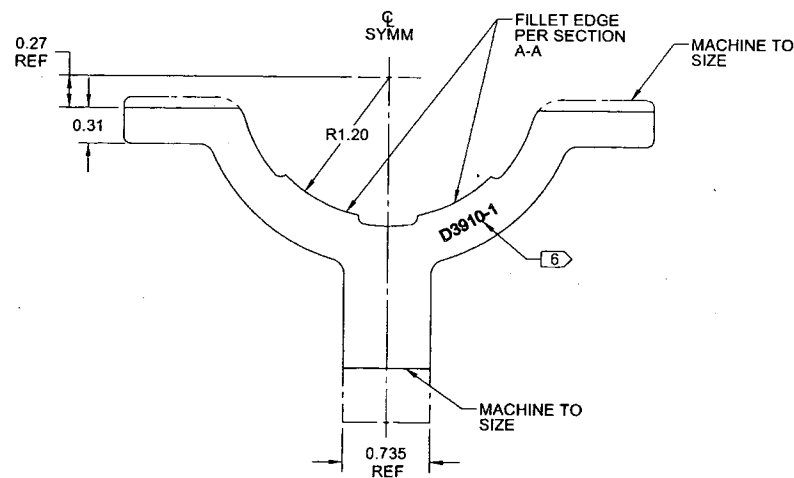
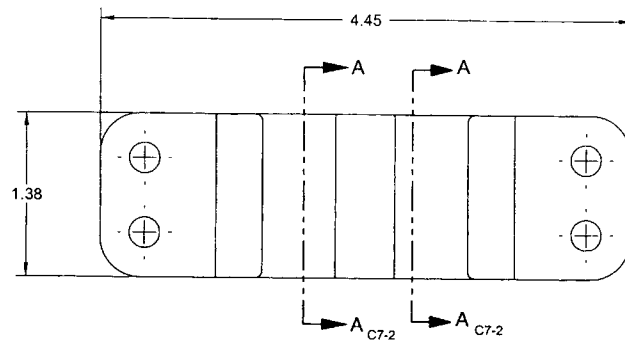
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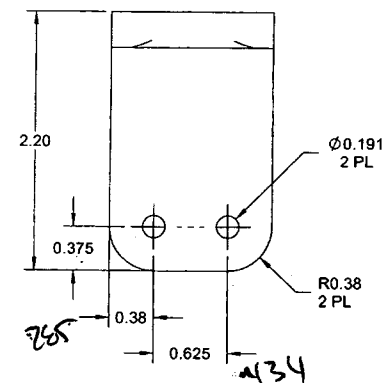


ROUND EDGE  
R0.06 MIN - R0.10 MAX  
2 PL

**SECTION A-A**  
C4-2  
C5-2



**D3910-1 X-TUBE LUG**



**RELEASED**  
2010-03-22

DESIGN	AJS	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	JPH		
CHECKED	5	DRAWING NO.	REV. B
MFG. APPR.	<i>[Signature]</i>	D3910	SHEET 2 OF 3
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	X-TUBE LUG (350)	NTS
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Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

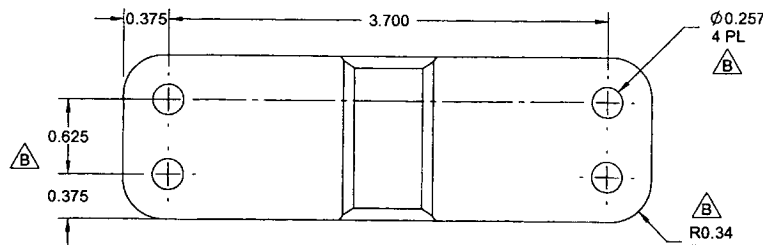
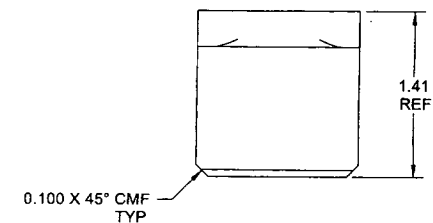
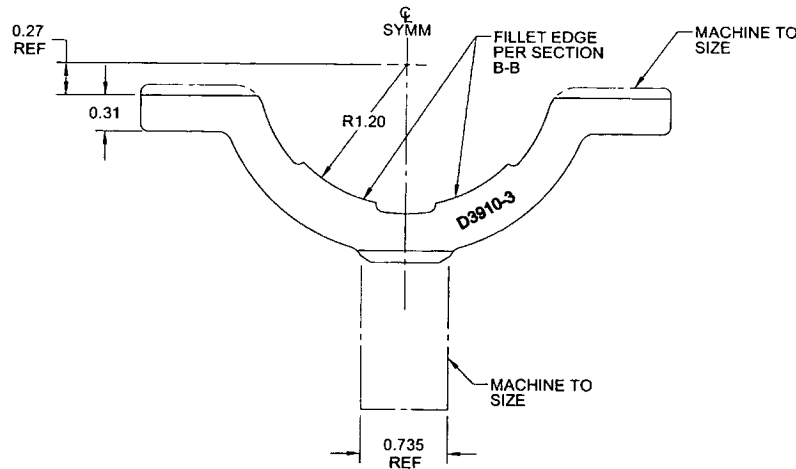
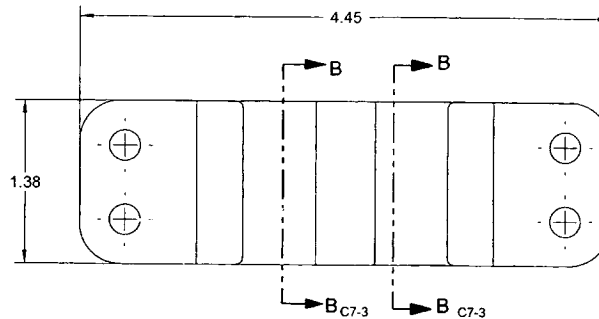
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



ROUND EDGE  
R0.06 MIN - 0.10 MAX  
2 PL

**SECTION B-B**  
C4-3  
C5-3



**D3910-3 X-TUBE LUG**

**RELEASED**  
2010-03-22

DESIGN	AJS	<b>DART AEROSPACE LTD</b>	
DRAWN	JPH	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D3910	SHEET 3 OF 3
APPROVED		TITLE	SCALE
DE APPR.		X-TUBE LUG (350)	NTS
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries





20 Terry Fox Drive, Vankleek Hill, Ontario K0B 1R0

Tel. (613) 678-3957 & (613) 678-2782 Fax (613) 678-3956 [metec@metec.ca](mailto:metec@metec.ca)

## CERTIFICATE OF CONFORMITY

SOLD TO:

Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, Ont.  
K6A 1K7

SHIPPED TO:

same

<u>QUANTITY</u>	<u>PART NUMBER</u>	<u>PART NAME</u>	<u>P.O. NUMBER</u>
38	D3910-1	Crosstube Lug	17216

DAS  
16  
12/07/16

MATERIAL: supplied by DART B81577

We hereby certify that the above parts were made in conformance with applicable drawings.

METEC Metal Technology Inc.

  
Shigi Walz

Vankleek Hill, July 16, 2012



20 Terry Fox Drive  
Vankleek Hill, Ontario K0B 1R0 , Canada  
Tel: (613) 678-3957  
Fax: (613) 678-3956

**Delivery Slip No.:** 18747

**Date:** Jul 16, 2012

**Page:** 1

<b>Sold to:</b>	<b>Ship to:</b>
<b>Dart Aerospace Ltd.</b> Att. Linda Lacelle 1270 Aberdeen Street Hawkesbury, Ontario K6A 1K7	Dart Aerospace Ltd. Att. Linda Lacelle 1270 Aberdeen Street Hawkesbury, Ontario K6A 1K7
<b>Order No.:</b> 17216	<b>Sold By:</b> Dewar, Eric
<b>Shipped By:</b> your truck	<b>Ship Date:</b>

Description	Unit	Ordered quantity	Shipped quantity	Backorder quantity
D3910-1 Crosstube Lug as per dwg D3910 REV.B B58619	Each	60	38	
The delivered goods must be inspected upon receipt to confirm compliance. Should there be discrepancies please notify METEC within 30 days of delivery. The goods are otherwise deemed accepted.				
Received by _____		Thank you for your order!		